1.5--2 mm. long, acuminate at apex, glabrous except for the ciliolate margins; calyx tubular, about 2 mm. long, minutely appressed-puberulent; corolla barely exceeding the calyx, its tube usually only about 2 mm. long, its limb about 1.5 mm. wide.

The type of this remarkable species was collected by Alban Stewart (no. 3320) -- in whose honor it is named -- at Tagus Cove, Albemarle Island, Galapagos Islands, on March 27, 1906, and is deposited in the Britton Herbarium at the New York Botanical Garden. The collector states that the species is common in lava beds at 300 feet altitude. It has hitherto been confused with V. litoralis H.B.K.

ADDITIONAL NOTES ON THE GENUS AEGIPHILA -- VII

Harold N. Moldenke

The following notes constitute a continuation of those published in Phytologia 1: 182-208, 222-240, and 248-272 (1937), 289-304 (1938), 364-368 (1939), and 372-400 (1940). An additional herbarium abbreviation herein employed and not previously explained is "Ra", which stands for the herbarium of the Museo Nacional de Historia de Buenos Aires.

Bentham in Benth. & Hook. f., Gen. Pl. 2²: 1151 (1876) recognized about 30 species in the genus <u>Aegiphila</u>. Today we recognize 158 species and varieties. An additional misspelling of the generic name is <u>Aegyphylla</u> Jacq. ex Moldenke, Suppl. List Invalid Names 1, in syn. (1941). Junell in Symb. Bot. Upsal. 4: 83, fig. 133 (1934) shows the structure of the gynoecium and gives important notes on the floral morphology of the group.

49a. AEGIPHILA ACULEIFERA Moldenke.

Austin Smith has furnished us with detailed notes about this species, including some characters not before recorded. He states that it is a tree 4--12 m. tall, of open growth, inhabiting the cloud forests of the Caribbean watershed and thickets on the edges of woodlands, where it is "quite a common tree", at altitudes of 4200 to 7000 feet, often in clay-loam and open shade. The bark is neutral-brown, gray, or gray-brown, a little glandularly roughened. The leaves are "barely stiffened", nearly glabrous, dark dull-green above, the venation prominent on the under surface. The under surface of the leaves is dark-green, not shiny, with a faint

tomentum, and has the midrib there cream-colored. The buds are roundish, pale- or grayish-green, more or less woollytomentose. The flowers, stems, pedicels, and petioles, according to this fine collector, are more or less woollytomentose. The expanded flowers are 20 mm. long and 10--13 mm. wide. The calyx is campanulate, pale-green, and glandular, the sepals 4 in number. The corolla is pure-white, creamy-white, or cream-colored, glandular, cruciform, and fleshy, the tube about 12 mm. long, the lobes recurved. The 4 stamens are "as long as the petals" and are placed alternately with them. The filaments are slender and white, the anthers large, brown, compressed, bilobed or "2-segmented". The style is either much longer than or much shorter than the stamens depending on whether the plant is male- or female-predominant. The stigma is much shorter than the style, 2-parted. The fruits ripen pale-yellow and semipellucid. The tree is in full inflorescence in June and August.

Additional citations: COSTA RICA: Alajuela: A. Smith 4210 (F, F), A.252 (F, N), H.1104 (F, N, N).

6. AEGIPHILA ANOMALA Pittier.

Austin Smith has furnished detailed notes about this rare species, stating that it is a tree 35-50 feet tall, of open spreading growth, often spreading to 50 feet, the base 1 1/2 to 3 feet in diameter, of open forests on wooded hillsides in light shade and in clay-loam soil on the Continental Divide and within the zone of the Pacific cloud-forest, often in semi-shade on clay ridges, at altitudes of from 4500 to 5800 feet. On one label he states that it is "common" and on another "scarce so high, more common westward". The sap is not milky. The bark is brown, thick, of cork-like structure, well-sutured, much roughened and shaggy by raised and slightly curled granulated narrow-oblong strips. The cambium is cream-yellow. The buds are round and gray-green, the unopened clusters grayish-yellow, the open ones showing brownish; the flower-buds are buffy-yellow in color. The leaves are rather lax and soft or slightly stiffened, much disfigured by the wind, clustered, bright-green or the newer ones light-green, velvety to touch. The calyx-cup is light-green. The flowers resemble those of Capparidaceae, 14--20 mm. wide when expanded, with a faint odor. The corolla is pure-white, "resembling Cleome", "springing independently of the base cluster from stem", the tube very small and urceolate, "canaliculated in throat". The corolla-limb opens flat, 2 of the 5 petals sometimes recurving. The 5 stamens are long-exserted and curved, the anthers brown, and the style short. "Seed capsules suggesting Capparidaceae." It has been collected in flower and fruit in July and August and has been confused

with A. Valerii.

Additional citations: COSTA RICA: Alajuela: A. Smith 138 (F), A.242 (F, N, N--photo, Z--photo), A.379 (F, F, F). Limón: H. Pittier s.n. [Herb. Instit. Physico-geogr. Nat. Costaric. 16,711] (F--photo of type).

70. AEGIPHILA BARBADENSIS Moldenke.

Additional citations: BARBADOS: Warming 101 (F--photo of type).

3. AEGIPHILA BOGOTENSIS (Spreng.) Moldenke.

This species has been collected in anthesis in September, December, and January, inhabiting low woods on slopes. It is said by Miss Mexia to be a small tree to 6 m. tall, with yellow-white and waxy flowers.

Additional citations: COLOMBIA: Cundinamarca: Bonpland s. n. (F--fragment); Triana 3743/4 [1] (Jc), 3743/4 [2] (Jc]. Tolima: Purdie s.n. (F--photo). ECUADOR: Pichincha: Mexia 7683 (N).

80. AEGIPHILA BOLIVIANA Moldenke.

Additional citations: BOLIVIA: Santa Cruz: Steinbach 6437 (F--photo of cotype), 7071 [Herb. Mus. Nac. Hist. Nat. Buenos Aires 30/2720] (Ra), 7289 (Z--photo).

23. AEGIPHILA BRACHIATA Vell.

Jörgensen states that the species grows to be a tree 4 m. tall, with sulphur-yellow flowers, blooming in September. He states that it is very common in Paraguay.

Additional citations: BRAZIL: State undetermined: Sellow 1269 [Macbride photos 17,590] (F--photo, Kr--photo). PARAGU-AY: Jörgensen 3662 (F, F, N).

120. AEGIPHILA BRACTEOLOSA Moldenke.

The species is said by Ducke and by Krukoff to inhabit secondary not-inundated forests or terra firma. It is described as a shrub to 12 feet tall and has been confused with A. arborescens (Aubl.) Gmel. [-A. integrifolia (Jacq.) Jacks.].

Additional citations: BRAZIL: Amazonas: Ducke 444 (F);

Krukoff 5060 (F, Mi).

102. AEGIPHILA BUCHTIENII Moldenke.

The species has been collected at an altitude of 800 m., in anthesis in Jamuary.

Additional citations: BOLIVIA: La Paz: Buchtien 1716 (N).

99. AEGIPHILA CANDELABRUM Briq.

The specific name of this species is sometimes lower-

cased, but was written with a capital initial letter in the original publication, and being a substantive, not agreeing with the generic name in gender, it probably would be classed among those which the International Rules of Nomenclature (more properly called "International Exceptions in Nomenclature"!) in Recommendation 43 allows to be capitalized. It is gratifying to the present writer to note how many modern authors are disregarding this unfortunate recommendation.

authors are disregarding this unfortunate recommendation.

Additional citations: PARAGUAY: Hassler 8120 [Macbride photos 24,621] (F--photo of type, Kr--photo of type).

90. AEGIPHILA CEPHALOPHORA Standl.

Additional citations: PANAMA: Canal Zone: Kenoyer 607 (F -- fragment of type, F--photo of type).

98. AEGIPHILA CHRYSANTHA Hayek.

An additional synonym is Aegiphila chrysantha Poepp. ex Moldenke, Suppl. List Invalid Names 1, in syn. (1941). The Klug 2104 and 2204 from Loreto, Peru, cited by me in Brittonia 1: 423 & 474 (1934) and Phytologia 1: 297 (1938) as A. vitelliniflora Klotzsch are actually A. chrysantha and the citations are repeated in their correct place hereinafter. Klug 2204 has the disks very conspicuous along the midrib on the lower leaf-surface and was identified as A. Smithii Moldenke by Standley. It has been collected in anthesis from March to July and at altitudes of 180—200 m. The common name "fetoro-ey" is recorded by Klug and applies to this species instead of to A. vitelliniflora as erroneously stated by me in Brittonia 1: 423 (1934) and Alph. List Common Names 12 (1939).

Additional citations: ECUADOR: Guayas: Eggers 14,348 [Macbride photos 20,349] (F--photo, F--photo, Kr--photo).
PERU: Lore to: Klug 2027 (F), 2104 (A, B, E, F, G, K, Mi, N, S, W), 2204 (B, Cb, E, F, G, K, S, W); Poeppig 2314 [Macbride photos 34,313] (F--fragment of isotype, F--photo of logotype).

98a. AEGIPHILA CHRYSANTHA var. GLABRA Moldenke, var. nov. Haec varietas a forma typica speciei recedit calyce ubique glabro.

This variety differs from the typical form of the species in its calyx being entirely glabrous. The corolla is described by the collector as being cream-colored. The type was collected by Guillermo Klug (no. 3894) at Juan Jui, Alto Río Huallaga, at an altitude of about 400 m., San Martín, Peru, in October, 1934, and is deposited in the Britton Herbarium at the New York Botanical Garden. The collector state that it is a liana, and Standley identified it as A. Smithii. Citations: PERU: San Martín: Klug 3894 (F-isotype, N-

type).

44b. AEGIPHILA CONTURBATA Moldenke.

Additional citations: BRAZIL: Maranhão: Newman s.n. [Macbride photos 28,377] (Kr--photo of type).

112. AEGIPHILA CORDATA Poepp.

An additional synonym, due to misaccrediting, is Aegiphila cordata P. & E. ex Moldenke, Suppl. List Invalid Names

1, in syn. (1941).

Additional citations: PERU: Loreto: Poeppig 2158 [Macbride photos 34,312] (F--photo of type, F--fragment of isotype, F--photo of type).

112a. AEGIPHILA CORDATA var. COLOMBIANA Moldenke.

Additional citations: COLOMBIA: Santander Sur: Haught 1885 (F--isotype).

113. AEGIPHILA CORDIFOLIA (Ruíz & Pav.) Moldenke.

Additional citations: PERU: Department undetermined: Ruíz & Pavon 12/68 (F), s.n. [Miña, Panatahua] (Kr--photo of isotype).

10. AEGIPHILA COSTARICENSIS Moldenke.

Austin Smith has furnished us with copious field notes about this species. He states that it is an erect bushy shrub 3 m. tall or a tree to 8 m. tall, the trunk 20 cm. in diameter at breast-height, with a broad flat crown, inhabiting the shade of Caribbean rain-forests, in mould and loamy soil at altitudes of 600-1100 m. The bark is brown or palebrown, slightly roughened by raised striations. The leaves are "thin-chartaceous" or thin-membranous, "faintly stiffened", dark opaque-green above, glabrous, with a faint sheen. The "cupules" [calyx?] are green; "dried peduncles and cupules brownish to black". The drupes are various shades of green, pale-green to greenish-yellow, ripening to Prussian-green. It has been collected in anthesis in December and in fruit in March and April and has been confused with the genus Vitex.

Additional citations: MEXICO: Chiapas: Matuda 572 (F-fragment), 2101 (F). GUATEMALA: Quezaltenango: Skutch 2012 (F). COSTA RICA: Alajuela: A. Smith F.1818 (F, N), F.1907 (F, N). Cartago: Pittier & Tonduz s.n. [Herb. Instit. Physico-geogr. Nat. Costaric. 9167] (F-fragment of isotype).

Guanacaste: Standley & Valerio 45,538 (F--photo).

35. AEGIPHILA CRENATA Moldenke.

Additional citations: BRAZIL: Paraná: <u>Dusén 10,541</u> [Macbride photos 30,182] (F--isotype, F--photo of isotype, Kr--

photo of isotype), 16,238 (F).

17a. AEGIFHILA CUATRECASASI Moldenke, Phytologia 2: 7-8. 1941.

Citations: COLOMBIA: Caquetá: <u>Cuatrecasas</u> <u>8566</u> (N-fragment of type, N--photo of type, W--type, W--isotype, Z--photo of type).

9. AEGIPHILA CUNEATA Moldenke.

The species is said by Ule to be a shrub 2-9 m. tall, with white flowers, blooming in July.

Additional citations: BRAZIL: Acre Territory: Ule 9859 ["14,684"] (F).

117. AEGIPHILA DEPPEANA Steud.

In Phytologia 1: 291 (1938) I cited a "Dugand & Mina 950" from "Department undetermined", Colombia, and in Phytologia 1: 383 (1940) I stated that this collection was actually made in the Panama Canal Zone. Dr. Armando Dugand, in a letter to me, dated March 18, 1941, has kindly pointed out to me that I was in error in the above references. The collection was made by Dr. Armando Dugand G. at Juan Mina, a small place some 10 miles southwest of Barranquilla, in the Department of Atlantico, Colombia. The collector describes the plant as having "small tubular reddish flowers" and records the vernacular name "sauco monte". Elias calls it a rather abundant woody vine around Barranquilla, with light bark and no economic uses. Williams and Martinez-Calderón describe it from Mexico as an uncommon straggly scandent shrub on the edge of paths in thickets or a vine in llanos, found at altitudes of 20--50 m., collected in fruit in March. It has been confused with A. elata Sw. by some recent workers. An additional synonym, due to misaccrediting, is Aegiphila Deppeana Moldenke, Suppl. List Invalid Names 1, in syn. (1941). In Brittonia 1: 452 (1934) I stated that the type of A. Berteriana Schau. was collected by Bertero. This is an error. It was collected by Balbis, as is shown by Macbride photo 33,932, cited below.

Additional citations: MEXICO: Tamaulipas: Schiede 1165 (F--photo of type). Veracruz: Ll. Williams 8872 (F). Oaxaca: Martinez-Calderón 418 (W). State undetermined: Sessé, Mociño, Castillo, & Maldonado 603 (F), 1074 (F). COSTA RICA: Department undetermined: C. W. Dodge 6189 (F). COLOMBIA: Atlantico: Dugand G. 950 [Mis. Yale School of Forestry 32,382] (F); Elias 1621 (F, N). Magdalena: Balbis s.n. [Macbride

photos 33,932] (F--photo); H. H. Smith 881 (Ca).

101. AEGIPHILA ELONGATA Moldenke.

Addit.cit.: BOLIVIA: La Paz: Buchtien 1645 (F-ph. of type)

124. AEGIPHILA ELATA Sw.

Williams describes the species as a "slender shrub, at times scandent, in secondary growth", a "vine on shrubs in clearings or rough pastures", and as a "scandent herb". As a shrub it is said to attain a height of 4 to 5 feet. Williams reports the flowers as sometimes white and the common name "bejuco de peine mico" in Oaxaca. It has been collected in fruit in February and has been confused with the genus Cestrum of the Solanaceae.

Additional citations: MEXICO: Oaxaca: Ll. Williams 9143 (F), 9271 (F), 9281 (F), 9354 (F), 9566 (F). Tabasco: Matuda 3031 (F), 3081 (F), 3406 (F). BRITISH HONDURAS: Gentle 2633 (F, Mi), 2684 (Mi), 2843 (F, Mi, Mi), 3047 (F, Mi), 3350 (N). HONDURAS: Atlantida: Yuncker, Koepper, & Wagner 8377 (F). COSTA RICA: Alajuela: Brenes 20,535 ["30"] (F). COLOMB-IA: Cundinamarca: Triana 3713 [1; "677"] (Jc). Tolima: Pérez Arbeláez & Cuatrecasas 6529 (W). VENEZUELA: Bolívar: Ll. Williams 12,828 (Ve, W).

121. AEGIPHILA ELEGANS Moldenke.

Krukoff describes the species as a vine, growing on terra firma in high forests.

Additional citations: BRAZIL: Amazonas: Krukoff 8701 (F).

61. AEGIPHILA FALCATA Donn. Sm.

Standley reports that the species is a shrub 2-4 m. tall, inhabiting dry or damp thickets, at an altitude of about 240 m., that the flowers are greenish-yellow or pale greenish-yellow, and that a vernacular name in Guatemala is "chiploque"; collected in flower and fruit in September.

Additional citations: MEXICO: Chiapas: Matuda 666 (Mi, Mi). GUATEMALA: Escuintla: J. D. Smith 2111 (F-photo of type). Retalhuleu: J. D. Smith 1479 (F-photo); P. C. Standley 88,699 (N), 88,767 (N). COSTA RICA: Department undetermined: Calvert & Calvert s.n. [Surubres, Oct. 1909] (Up).

15. AEGIPHILA FASCICULATA Donn. Sm.

An additional synonym, due to mis-accrediting, is Aegiphila fasciculata H.B.K. ex Moldenke, Suppl. List Invalid Names 1, in syn. 1941.

Additional citations: GUATEMALA: Alta Verapaz: Türckheim

4013 (F--photo of type).

114. AEGIPHILA FENDLERI Moldenke.

The species grows at altitides of 1450--1650 m., and has been collected in anthesis in Octobe.

Additional citations: VENEZUELA: Aragua: Chardon 189 (N-fragment, Ve, W).

31. AEGIPHILA FERRUGINEA Hayek & Spruce.

Rimbach has furnished some additional information about this species. He states that the cortex of the trunk is gray and slightly fissured, soft in texture, and the wood is white, with distinct growth-rings; also that it is a medium-sized tree of the forest. An additional synonym, due to misaccrediting, is Aegiphila ferruginea Hayek ex Moldenke, Suppl. List Invalid Names 1, in syn. 1941.

Additional citations: ECUADOR: Chimborazo: Rimbach 616
(F). Imbabura: Lehmann 4700 [Macbride photos 17,584] (F-photo, Kr-photo). Pichincha: Firmin 632 (F-photo); Penland Summers 939 (F); Spruce 5473 (F-fragment of isotype, F-

photo of isotype).

63. AEGIPHILA FILIPES Mart. & Schau.

The species is described by collectors as a tall shrub or small tree, 10—18 feet tall, with a stem 1/2 to 1 inch in diameter, sometimes to 22 feet tall, inhabiting pastures, forests, and jungles on varzea land, the flowers white or yellowish. The calyx is green, remarkably and quite characteristically wide during anthesis. The fruit is yellow or orange. It has been collected in anthesis in March and from July to September, and in fruit in August. It ascends to 1900 m. altitude in Colombia.

Additional citations: COLOMBIA: Huila: Pérez Arbeláez & Cuatrecasas 8360 (W). PERU: Loreto: L1. Williams 533 (F), 2165 (F), 2469 (F), 2622 (F), 2778 (F), 2832 (F), 2850 (F), 2856 (F), 3115 (F), 3146 (F). BRAZIL: Amazonas: Krukoff 5125 [Herb. Dept. Bot. Est. S. Paulo 35,047] (Ca, F, Mi, Sp), 8041 (F), 8042 (F); Riedel 1418 (F). Pará: Martius s.n. [Herb. Monac. 1020 & 1689; Macbride photos 20,350] (F-photo of cotype, Kr--photo of cotype).

66. AEGIPHILA FLORIBUNDA Moritz & Moldenke.

The label on the photogrpah cited below says "Moritz & Moldenke 1765" for the collection number, in error.

Additional citations: VENEZUELA: Aragua: Moritz 1765

[Macbride photos 34,310] (F--photo).

57. AEGIPHILA FOETIDA SW.

Additional citations: JAMAICA: R. C. Alexander s.n. (F--photo); Swartz s.n. [Jamaica] (F--photo of type).

62a. AEGIPHILA GLANDULIFERA var. PARAENSIS Moldenke.

The variety is described as a shrun 12 feet tall, blooming in August; the fruit red when ripe. It has been confused with A. filipes.

Additional citations: BRAZIL: Pará: Ginzberger 908 (F);

<u>Krukoff</u> 5923 (F, Mi).